No. 07-588, 07-589 and 07-597

Supreme Court, U.S.
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In the Supreme Court of the United States

ENTERGY CORPORATION, PETITIONER
v.
ENVIRONMENTAL PROTECTION AGENCY, ET AL.

PSEG FOSSIL LLC, ET AL., PETITIONERS
v.
RIVERKEEPER, INC., ET AL.

UTILITY WATER ACT GROUP, PETITIONER
v.
RIVERKEEPER, INC., ET AL.

On Writ of Certiorari
to the United States Court of Appeals
for the Second Circuit

BRIEF FOR RESPONDENTS RIVERKEEPER, INC., ET AL.

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QUESTION PRESENTED

Whether Section 316(b) of the Clean Water Act, 33 U.S.C. § 1326(b), authorizes the Environmental Protection Agency to compare costs with benefits in determining the "best technology available for minimizing adverse environmental impact" at cooling water intake structures.

PARTIES TO THE PROCEEDING

In the United States Court of Appeals for the Second Circuit, the petitioners were Riverkeeper, Inc., Natural Resources Defense Council, Waterkeeper Alliance, Soundkeeper, Inc., Scenic Hudson, Inc., Save the Bay – People for Narrangansett Bay, Friends of Casco Bay, American Littoral Society, Delaware Riverkeeper Network, Hackensack Riverkeeper, Inc., New York/New Jersey Baykeeper, Santa Monica Baykeeper, San Diego Baykeeper, California Coastkeeper, Columbia Riverkeeper, Conservation Law Foundation, Surfrider Foundation, State of Rhode Island, State of Connecticut, State of Delaware, Commonwealth of Massachusetts, State of New Jersey, State of New York, Appalachian Power Co., Illinois Energy Ass'n, Utility Water Act Group, Entergy Corp., and PSEG Fossil LLC and PSEG Nuclear LLC. The respondents were the United States Environmental Protection Agency (EPA) and Stephen L. Johnson, in his official capacity as Administrator of EPA. Appalachian Power Co. and the Illinois Energy Ass'n were petitioners before the Second Circuit and are not parties in the proceedings now before this Court.

Pursuant to Supreme Court Rules 24.1 and 29.6, there is no change in the corporate disclosure statement previously filed by Riverkeeper, Inc., Natural Resources Defense Council, Waterkeeper Alliance, Soundkeeper, Inc., Scenic Hudson, Inc., Save the Bay – People for Narrangansett Bay, Friends of Casco Bay, American Littoral Society, Delaware Riverkeeper Network, Hackensack Riverkeeper, Inc., New York/New Jersey Baykeeper, Santa Monica Baykeeper, San Diego Baykeeper, California Coastkeeper, Columbia Riverkeeper, Conservation Law Foundation, or Surfrider Foundation.

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Russello v. U.S., 464 U.S. 15 (1983) 33

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Sandusky Portland Cement Co. v. Dixon Pure Ice Co., 251 F. 506 (7th Cir. 1918) 2

Seacoast Anti-Pollution League v. Costle, 597 F.2d 306 (1st Cir. 1979) 45

Union Electric Co. v. EPA, 427 U.S. 246 (1976) 42

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§ 302(b)(2), 86 Stat. 846 (1972) 34

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Cass R. Sunstein, *The Cost-Benefit State: The Future of Regulatory Protection* (2002) 50

Cass R. Sunstein, *Which Risks First?*, 1997 U. Chi. Legal F. 101 51

David M. Driesen, *Distributing the Costs of Environmental, Health, and Safety Protection: The Feasibility Principle, Cost-Benefit Analysis, and Regulatory Reform*, 32 B.C. Envtl. Aff. L. Rev. 1 (2005) 50

Miscellaneous—Continued: Page

Environmental Effects of Producing Electric Power, Hearings before the Joint Committee on Atomic Energy, 91st Cong., pt. 1 (1969) 5

Eric A. Posner, *Controlling Agencies with Cost-Benefit Analysis: A Positive Political Theory Perspective*, 68 U. Chi. L. Rev. 1137 (2001) 51

Frank Ackerman & Lisa Heinzerling, *Pricing the Priceless: Cost-Benefit Analysis of Environmental Protection*, 150 U. Pa. L. Rev. 1553 (2002) 50

H.R. Rep. No. 112 104th Cong., 1st Sess. pt. 1 (1995)..... 41

Henry C. Meyer, Jr., *Steam Power Plants: Their Design and Construction* (3d ed. 1912) 2

Hon. Stephen Breyer, *Breaking the Vicious Circle – Toward Effective Risk Regulation* (1993) 51

House Proposal on Thermal Discharges (offered 9/14), § 316(e)(1)&(2) 13

Miscellaneous—Continued: Page

Legislative History of the Water Pollution Control Act Amendments of 1972 (Committee Print compiled for the Senate Committee on Public Works by the Library of Congress), Ser. No. 93-1 (1973)

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Legislative History of the Clean Water Act of 1977 – A Continuation of the Legislative History of the Federal Water Pollution Control Act Amendments of 1972 (Committee Print compiled for the Senate Committee on Environment and Public Works by the Library of Congress), Ser. No. 95-14 (1975)

Miscellaneous—Continued: Page

Conference Report, 3 *Leg. Hist.* 258 40

Statement of Senate Manager Senator Muskie, 3 *Leg. Hist.* 427 40

1 Louis C. Hunter, *A History of Industrial Power in the United States*, 1780-1930 1 (1979) 1

2 Louis C. Hunter, *A History of Industrial Power in the United States*, 1780-1930 2 (1985) 1, 2

M. M. Samuels, *Power Unleashed: The Story of Electricity and Power* (1943) 2

Memorandum from Leon Billings to Senator Muskie on "Status of the Water Pollution Conference" (July 11, 1972) 13

Memorandum from Leon G. Billings (Staff Director) to Senate Conferees, Re: Options to the House Proposal on Title III (June 15, 1972) 11

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Office of Science and Technology of the Executive Office of the President, *Considerations Affecting Steam Power Plant Site Selection* (1968) 6

Miscellaneous—Continued: Page

Paul Milazzo, *Unlikely Environmentalists – Congress and Clean Water, 1945-1972* (2006) 7, 9

Richard L. Revesz & Michael A. Livermore, *Retaking Rationality – How Cost-Benefit Analysis Can Better Protect the Environment and Our Health* (2008) 50, 52

Robert H. Frank & Cass R.. Sunstein, *Cost-Benefit Analysis and Relative Position*, 68 U. Chi. L. Rev. 323 (2001) 51

Sidney A. Shapiro & Christopher H. Schroeder, *Beyond Cost-Benefit Analysis: A Pragmatic Reorientation*, 32 Harv. Envtl. L. Rev. 433 (2008) 50

The American Heritage Dictionary of the English Language (4th ed. 2000) 24, 25, 26

The Oxford English Dictionary (2d ed. 1989) 24, 25

The Scribner-Bantam English Dictionary (1977) 25

Thermal Pollution, Hearings before the Subcomm. on Air and Water of the Senate Comm. on Public Works, 90th Cong., pts 1-4 (1968) 5

Miscellaneous—Continued: Page

U.S. Department of Energy, *Addressing the Critical Link Between Fossil Energy and Water* (2005) 3, 4

Webster's Third New International Dictionary (1971) 24, 25, 26

BRIEF FOR RESPONDENTS RIVERKEEPER, INC., ET AL.

STATEMENT

This Court granted certiorari to consider "whether Section 316(b) of the Clean Water Act authorizes the Environmental Protection Agency to compare costs with benefits in determining the 'best technology available for minimizing adverse environmental impact' at cooling water intake structures." The statutory language of Section 316(b) directly answers that question by denying EPA the authority the Agency claims to compare costs with benefits. The judgment of the court of appeals should be affirmed.

A. Background

1. The Use of Cooling Water in the Production of Power

The federal regulations challenged in this case apply to power plant cooling water intake structures that withdraw more than 50 million gallons of cooling water per day. Water has long served a central role in the production of power because of its remarkable physical and chemical characteristics.

During the nation's early years, water mills exploited the energy potential within water's liquid flow. 1 Louis C. Hunter, *A History of Industrial Power in the United States 1780-1930* 1-3 (1979). With the introduction of the steam engine in the middle of the eighteenth century, however, water became a power source based on its ability to convert from a liquid to a gas and then to cool. 2 Louis C. Hunter, *A History of*

Industrial Power in the United States 1780-1930 2 (1985).

A steam engine produces power by raising the temperature of liquid water sufficiently high to convert it to a gas and then by using the pressure generated by the gas in a confined space to produce mechanical power – for instance, to drive a piston. The first steam engines did not utilize water's cooling capacity, but as early as 1698, a newly-designed steam engine was able to produce greater power by spraying cooling water to condense the steam back to liquid water – the resulting vacuum generated further pressure capable of producing more power. See 2 Hunter, *A History of Industrial Power, supra*, at 1-2, 5-7, 671; see also Henry C. Meyer, Jr., *Steam Power Plants: Their Design and Construction*, 142-43 (3d ed. 1912). The increased demand by steam engines for water inevitably generated conflicts between competing users of waterways. See *Mason v. Hill*, 110 Eng. Rep. 692 (1833); *Sandusky Portland Cement Co. v. Dixon Pure Ice Co.*, 251 F. 506 (7th Cir. 1918).

The steam engine's design remains basically the same today, whether the heat necessary to convert water from a liquid to a gas is produced by fossil fuel combustion or nuclear fission and whether the power drives a piston or a turbine to produce electricity. See M. M. Samuels, *Power Unleashed: The Story of Electricity and Power*, 222-24 (1943). What has dramatically changed is the physical scale of power plant operations and, accordingly, their environmental impact. Today, a typical 500 megawatt coal-fired power plant uses approximately 12 million gallons of cooling water *per hour*, or approximately 300 million gallons *per day*. For larger power plants, cooling water consumption can be greater than three billion gallons

per day. In 2000, thermoelectric power plants used 136 billion gallons of fresh water per day, which represents about 39 percent of the total withdrawal of fresh water in the United States. See U.S. Department of Energy, *Addressing the Critical Link Between Fossil Energy and Water*, 1-4 (2005). Thermoelectric power is also currently the single largest source of withdrawal of total water (fresh water and saline water) in the nation, accounting for 47 percent of that total. Pet. App. 170a.[1] The power plants covered just by the Phase II rule at issue in this case "withdraw more than 214 billion gallons of cooling water a day from waters of the United States." *Id.* at 169a-170a.

2. Cooling Water Intake Structures and their Adverse Environmental Impact

Because cooling water intake structures withdraw such extraordinarily large amounts of water, their withdrawals necessarily affect the full spectrum of organisms in the aquatic ecosystem at all life stages. Aquatic organisms are drawn into cooling water systems where they are either "impinged" onto components of the intake structure or "entrained" within the cooling water system itself. Pet. App. 170a. Impingement occurs when organisms are trapped against intake screens by the force of the water being withdrawn into the structure. *Id.* at 170a-171a. Entrainment happens when aquatic organisms are instead drawn through the cooling system. Entrained organisms are subject to severe mechanical, thermal, and toxic stresses. *Id.* at 171a.

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[1] Citations to the Pet. App. refer to the appendix filed in No. 07-588.

As EPA has acknowledged, it is impossible to quantify with any precision the nature and extent of the adverse environmental impacts caused by the withdrawal of approximately 80 trillion gallons of water per year by cooling water intake structures. EPA has nonetheless estimated, looking only to fish and shellfish mortality caused by entrainment and impingement, that the cooling water intake structures covered just by the Phase II regulations at issue in this case cause the death of more than 3.4 billion fish and shellfish each year, expressed in terms of "age 1 equivalents."[2] *Id.* at 168a-174a; see National Wildlife Federation Amicus Br. I.A.1.

The harm caused by a cooling water intake structure is most directly related to the amount of water the structure withdraws, which largely turns on the type of cooling system the facility utilizes. There are generally two types of cooling systems: once-through cooling systems and closed-cycle cooling systems (wet or dry). As its name suggests, a once-through system circulates the water through a condenser and then returns the now-heated water to the water body from which it was withdrawn. U.S. DOE, *Addressing the Critical Link, supra*, at 3-4. A wet closed-cycle cooling system uses wet cooling towers, ponds, or lakes to dissipate the heat from the cooling water to the atmosphere. *Id.* A dry cooling system uses air to cool the exhaust steam. *Id.* The water use requirements of these cooling systems vary significantly. On average, a once-through system requires 37.7 gallons of water per kilowatt hour of power produced. A wet closed-cycle

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[2] See Pet. App. 172a ("age 1 equivalents is an accepted method for converting losses of all life stages into individuals of an equivalent age").

cooling system, by contrast, uses only 1.2 gallons per kilowatt hour produced. *Id.*

3. The Clean Water Act[3]

a. The first reported congressional concern regarding the environmental harm from power plants' accelerating use of cooling water was in the 1960s. In 1967, Senator Warren Magnuson warned that "by 1980 thermal power plants throughout the Nation will require an amount of cooling water greatly in excess of the average flow of the mighty Mississippi at St. Louis." 113 Cong. Rec. 30129 (1967). Congress held extensive hearings in 1968 and 1969 on the effects of waste heat produced by industrial facilities, focusing on the adverse environmental effects of thermal discharges, but also considering the impact of cooling water intake.[4] A 1968 White House report described how "the large volumes of water withdrawn in once-through cooling processes" can

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[3] This brief offers an extensive discussion of the legislative background leading up to Section 316(b)'s congressional enactment. None is necessary for this Court's resolution of the question presented, which is answered by the statutory language's plain meaning without any resort to the legislative history. The legislative history is entirely in keeping with that plain meaning (see pp. 47-50, *infra*), and is provided only for the purpose of refuting petitioners' mischaracterizations of it.

[4] See *Thermal Pollution, Hearings before the Subcomm. on Air and Water of the Senate Comm. on Public Works*, 90th Cong., pts 1-4 (1968); *id.* at 1 (statement of Sen. Muskie) ("[b]y the end of the next decade, approximately one-sixth of the total fresh-water runoff in the United States will be required for cooling and condensing purposes."); *id.* at 98-102, 104, 112-13, 137-38, 143 (testimony on intake impact on aquatic organisms); *Environmental Effects of Producing Electric Power, Hearings before the Joint Committee on Atomic Energy*, 91st Cong., pt. 1, 341-45, 375-76 (1969) (intake impact).

have "as much or more effect on aquatic life in a stream than the waste discharges on which control measures are required." See Office of Science and Technology of the Executive Office of the President, *Considerations Affecting Steam Power Plant Site Selection*, 46 (1968).

b. In 1972, "Congress, recognizing that 'the Federal water pollution control program * * * ha[d] been inadequate in every vital aspect * * *,' passed the Federal Water Pollution Control Act Amendments of 1972, Pub. L. 92-500, 86 Stat. 816," now referred to as the Clean Water Act. *Milwaukee v. Illinois*, 451 U.S. 304, 310 (1981), *quoting* S. Rep. No. 92-414, 7 (1971), 2 *Legislative History of the Water Pollution Control Act Amendments of 1972*, 1452 (Committee Print compiled for the Senate Committee on Public Works by the Library of Congress), Ser. No. 93-1 (1973) (hereinafter "2 *Leg. Hist.*"). The 1972 "Amendments were viewed by Congress as a 'total restructuring' and 'complete rewriting' of the existing water pollution legislation." *Id.* at 317, *quoting* House Debate on H.R. 11896, 1 *Leg. Hist.* 350-51, 359-60 (remarks of Reps. Blatnik and Jones).

The single most important regulatory reform achieved by the 1972 Act was the seemingly paradoxical notion that the nation's ambitious water quality goals could best be achieved if they were no longer tied to compliance with water quality standards. Congress concluded that past efforts to maintain such a regulatory link had failed because the science of water ecology was too complex to measure the "tolerable effects" with the precision necessary to have water quality standards serve as the primary touchstone for determining the appropriate level of control. *EPA v. California State Water Resources Control Board*, 426 U.S. 200, 202-03 (1976).

The 1972 Act, accordingly, fundamentally restructured the law to rely in the first instance on the imposition of a series of categorically-determined technology-based standards that did not themselves depend on site-specific showings of impact of particular activities on water quality. First promoted by Senator Howard Baker and then embraced by Senator Edmund Muskie,[5] these technology-based standards were designed to achieve the maximum reduction in activities that degraded water quality, by focusing on the extent to which certain technology was, depending on the type of source or pollutant, "practicable," "achievable," "available" or "demonstrated." See Pub. L. 92-500, §§ 301(b), 304(b), 306, 86 Stat. 844-45, 851, 854-56 (1972). The new Act retained the prior approach of seeking compliance with state water quality standards, but only as a supplement to the controls first imposed by the technology-based standards. See *id.* § 301(b)(1)(C); *EPA v. California State Water Resources Control Board*, 426 U.S. at 205 n.12.

c. Congress accomplished this major reform only after the House and Senate first passed sharply different bills and met 39 times over six months to reach an agreement. Statement of Sen. Muskie, 1 *Leg. Hist.* 161. A central issue splitting the two chambers was the extent to which Congress should delegate to EPA the authority to consider and compare costs with benefits in determining the technology-based standards.

The Senate favored a technology-based approach that did not depend on EPA's assessment of the associated water quality benefits of such control,

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[5] See Paul Milazzo, *Unlikely Environmentalists – Congress and Clean Water, 1945-1972*, 214, 220-21 (2006).

including a comparison of control costs to benefits. The Senate report accompanying its bill left no question why such a fundamental shift was necessary: "the great difficulty associated with establishing reliable and enforceable precise effluent limitations on the basis of a given stream quality. Water quality standards, in addition to their deficiencies in relying on the assimilative capacity of receiving waters, often cannot be translated into effluent limitations * * * because of the imprecision of models for water quality and the effects of effluents in most waters." S. Rep. 92-414, 2 *Leg. Hist.* 1426. "With effluent limits, the Administrator can require the best control technology; he need not search for a precise link between pollution and water quality." *Id.*

The Senate version of the new law required *existing point sources* of pollution to comply with two phases of technology-based controls that would become increasingly stringent over time: "In Phase I, to be implemented by 1976, all industrial pollution sources must apply the best practicable technology" ("BPT") and "[i]n Phase II, to be implemented by 1981, * * * industries will be required to apply, where the goal of no-discharge cannot be attained, the best available technology" ("BAT"). S. Rep. 92-414, 2 *Leg. Hist.* 1426. Although for each, the "costs" of control was a factor to be considered in determining the relevant technology-based standard, whether BPT or BAT, there was no allowance for any weighing by EPA of the costs and benefits, consistent with the Senate's decision to remove any linkage between the technology-based standards and a showing of water quality impacts. By contrast, for *new point sources*, the applicable technology-based standard in the Senate bill did allow for an exemption from the categorically-determined technology-based best

available control technology standard based on facility-specific weighing of costs and benefits, but only for those facilities that became subject to the standard for "new" sources because of a modification of the facilities. S. Rep. 92-414, 2 *Leg. Hist.* 1475, 1477; see S. 2770, § 306(b)(1)(C), 2 *Leg. Hist.* 1626-27.

d. The House and the Administration immediately criticized the Senate for its rejection of water quality-based regulation and its related elimination of cost-benefit analysis from almost all aspects of technology-based standards. The EPA Administrator complained that because the Senate bill "eliminates over a period of time the concept of water quality standards and instead depends completely on effluent limitations based on the best available technology or better. * * * Thus, the social benefit we are all seeking – high quality water – is eliminated from the equation and technology is substituted in its place." *Hearings on H.R. 11896*, 2 *Leg. Hist.* 1183; see *id.* at 1132 (testimony of Russell Train, Chairman, Council on Environmental Quality) (criticizing "an across-the-board treatment requirement unrelated to the benefits to be derived"). The Administration produced a cost-benefit analysis that claimed that the costs of the Senate version were exorbitantly high compared to its benefits. Milazzo, *Unlikely Environmentalists*, *supra*, at 227-28.

The House-passed bill sharply departed from the Senate version on the role of cost-benefit analysis. For determining both BPT and BAT, the House bill expressly instructed EPA to consider "the cost and the economic, social, and environmental impacts of achieving such effluent reduction." H.R. Rep. No. 92-911, 1 *Leg. Hist.* 794; see H.R. 11896, § 304(b)(1)(B) & (b)(2)(B), 1 *Leg. Hist.* 980-81. The House bill also declined to make the Phase II BAT requirement

applicable absent subsequent congressional action. It first required the National Academy of Sciences to complete a cost-benefit analysis. H.R. Rep. No. 92-911, 1 *Leg. Hist.* 789; see H.R. 11896, § 301(b)(2)(A), 1 *Leg. Hist.* 963-64. Finally, the House version provided that technology-based provisions for new sources would not apply to modified sources in the absence of a "reasonable relationship" of costs to benefits. *Id.* at 798.

e. The Conference Committee met over six months before reaching agreement.[6] The two chambers split

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[6] The voluminous materials documenting the committee negotiations on the precise wording of the bill's language, especially regarding technology-based standards and the proper role of cost-benefit analysis, are all available in the National Archives and located in a series of "Cartons" labeled "Accession No. 46-75-003, Senate Public Works Committee, Subcommittee on Environmental Pollution, Federal Water Pollution Legislation Files." Within each box there are "Folders" with topic labels and often smaller individual "Files" with topic labels. Only because the more detailed history documented by the National Archives provides a further layer of historical detail potentially of interest to some members of the Court, this brief includes references to that documentation. See notes 7-8, *infra*. The brief refers to six documents located in four different committee files: (1) a file labeled "316," containing drafts of Section 316, in a Folder labeled "Conference Committee Language" contained in Carton No. 2; (2) a file containing correspondence on "Phase I and Phase II," in a Folder labeled "Conference Committee Memos" in Carton No. 2; (3) files labeled "9/13" and "9/14," containing notes on the individual sessions of the House and Senate conferees held on September 13th and 14th, 1972, in a Folder labeled "House-Senate Conference Committee 1972 Water Pollution Bill," in Carton No. 2; and (4) a file labeled "General," containing internal committee memoranda to Senator Muskie and to the Senate Conferees in a folder labeled "House-Senate Conference Committee 1972 Water Pollution Bill" in Carton No. 2. References to documents within this archival material will hereinafter be referred to by the name of the document, file name and the National Archives (e.g., "*A Possible*

fundamentally on the central policy issue of whether the degree of regulation should be defined, as the Senate preferred, by technology-based standards that did not turn on an assessment of water quality impacts and cost-benefit analysis, or the House version, which did.[7]

In the fall of 1972, the conferees reached agreement on a bill that each chamber passed by overwhelming margins, and then Congress overrode a veto triggered by the President's view that the bill's "unconscionable $24 billion price tag" far outstripped its benefits. Veto

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Basis for Agreement on Thermal Pollution, '316 File' Nat. Arch."). For the Court's convenience, we are filing a motion to lodge copies of the National Archives materials cited.

[7] The internal committee documents in the National Archives show a persistent effort by some House conferees to allow EPA to compare costs and benefits both in the establishment of technology-based standards and in allowing individual facilities to seek water quality variances. And, they also demonstrate an equally persistent effort, mostly by Senate conferees, to resist both efforts on the ground that such provisions would invariably invite back into the regulatory equation the very consideration of water quality impacts they believed would undermine the statute's ability to achieve its goals. See, *e.g.*, *Memorandum from Leon G. Billings [Staff Director] to Senate Conferees, Re: Options to the House Proposal on Title III*, 2 (June 15, 1972) ("Phase I and II File" Nat. Arch.) ("The staff believes that the House proposal which would require the application of new source performance standards to existing sources by 1985 unless social and economic and environmental cost outweighed social, economic and environmental benefits would be disastrous. * * * [T]here is no way to adequately quantify the social and economic and environmental benefits of pollution control in relation to the cost associated with that pollution control."); *id.* at 3 ("The House proposal is directly contrary to the Senate concept in that it would require that * * * no controls could be applied unless there were quantifiable benefits to be achieved. This is nothing more or less than an extension of water quality standards.").

Message, 1 *Leg. Hist.* 137. The new law embraced the technology-based approach favored by the Senate with a two-phase approach for existing industrial point sources of pollution and a separate standard for new sources, but with a few discrete concessions to the House.

The legislation enacted allowed for some "limited cost-benefit analysis" in BPT's determination for Phase I, but not for BAT in Phase II. Statement of Sen. Muskie, 1 *Leg. Hist.* 170. "In assessing the BPT the Administrator is to consider 'the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application.'" *EPA v. National Crushed Stone*, 449 U.S. 64, 70 (1980). But "in assessing BAT total cost is no longer to be considered in comparison to effluent reduction benefits." *Id.* at 71; see *id.* at 71 n.10.

f. Congressional consideration of Section 316, including Section 316(b)'s provision regarding a technology-based standard applicable to cooling water intake structures, reflects this same legislative debate concerning the extent to which, if at all, Congress should authorize EPA to compare costs and benefits in regulating activities that adversely affect the aquatic environment. The House and the Senate were, at the outset, focusing largely on the impact of *thermal discharges*, until the House introduced the related issue of cooling water intake that had been discussed in the prior legislative hearings.

On the discharge issue, the Senate bill favored subjecting the discharge of heat to the generally applicable technology-based standards for existing and new sources. Statement of Sen. Muskie, 1 *Leg. Hist.* 175. The House bill, however, considered "heat"

appropriate for regulation based on a cost-benefit analysis. The House bill, accordingly, instructed EPA to exempt a thermal discharge from regulation upon a determination by EPA that "the economic and social costs of implementing the regulations at a point source bear no reasonable relationship to the economic and social benefits (including water quality objectives) to be attained." H.R. 11896, § 316(d), 1 *Leg. Hist.* 1043-44. The House also called for consideration of "alternative methods" for control, including "cooling devices," "once-through cooling," and "evaporative cooling towers," and instructed EPA to take into account "their relative social and economic costs and benefits," and "their relative impact on the environment, considering not only water quality but also * * * conservation of natural resources." *Id.* § 316(b).

The House and Senate conferees met over the summer on Section 316 without reaching agreement, but then reached a compromise agreement by drawing a distinction between the regulation of thermal discharges and cooling water intake.[8] Both would be

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[8] The stalemate continued over the summer (see *Memorandum from Leon Billings to Senator Muskie on "Status of the Water Pollution Conference*, 2-3 (July 11, 1972) ("General File" Nat. Arch.)). On September 13th and 14th, the conferees broke the logjam by representatives within each chamber suggesting a water-quality approach for thermal *discharge* and a technology-based approach for cooling water *intake*. Under the House proposal, regulation of thermal discharges would have been based on water quality standards, and "cooling water intake facilities" would be subject to a two-phase technology-based standard approach, with a July 1, 1977, deadline for compliance with "best practicable control technology" and a July 1, 1983 deadline for application of "best available demonstrated technology." See *House Proposal on Thermal Discharges (offered 9/14)*, § 316(e)(1)&(2), ("316 File" Nat. Arch.) Among the Senate conferees, Senator Jennings Randolph

subject to technology-based standards, with "heat" expressly defined as a "pollutant" and thereby triggering the BPT and BAT technology-based standards (see § 502(6), 1 *Leg. Hist.* 73), but a biologically-based variance – expressed in terms of protection of fish populations – would be made available for thermal discharges under Section 316(a). See 86 Stat. 876, 1 *Leg. Hist.* 63. Section 316(b) set forth a distinct statutory approach to cooling water intake. It simply announced a technology-based standard for the express purpose of "minimizing adverse environmental impact" without any allowance for the kind of relaxing of a technology-based standard contemplated by Section 316(a). *Id.*

4. EPA Initial Implementation

a. EPA first promulgated Section 316(b) regulations in 1976. 41 Fed. Reg. 17387 (J.A. 38). The Agency then refuted any claim of authority to compare costs and benefits in determining the "best technology available" ("BTA") required for cooling water intake structures under Section 316(b). Rejecting an industry recommendation, EPA explained not only that "[n]o comparison of monetary costs with the social benefits of minimizing adverse environmental impacts * * * is

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proposed a similarly-bifurcated approach to thermal discharge and cooling water intake, except that it provided that "[t]he design and construction of cooling water intake structures would have to be in accordance with the best available technology for minimizing environmental effects." See *A Possible Basis for Agreement on Thermal Pollution* ("316 File" Nat. Arch.); Notes on 9/13 and 9/14 Conference Meetings ("9/13 File" & "9/14 File" Nat. Arch.) (describing Senator Randolph's proposal at "9/13 File," p. 3). The documents within the relevant files belie the Solicitor General's assumption (Br. 11, 23, 34) that Section 316(b) was a mere "afterthought."

required by the terms of the Act" (*id.* at 17388), but also indicated that the Agency had no discretion to do so, because "[t]he statute *directs* the Agency to insure that enumerated aspects of cooling water intake structures reflect the best technology available for minimizing adverse environmental effects" and, consequently, "the effort *must* be to select the most effective means of minimizing (*i.e.*, 'reducing to the smallest possible amount or degree') those adverse effects." *Id.* (emphases supplied).

b. The Fourth Circuit in *Appalachian Power Co. v. Train*, 566 F.2d 451 (1977) invalidated EPA's Section 316(b) regulations on procedural grounds. After more than 15 years of inaction, EPA entered into a consent decree to promulgate new regulations, which the Agency ultimately accomplished in three specific phases:[9] (1) Phase I for cooling water intake structures at new facilities that withdraw daily at least two million gallons of water; (2) Phase II for intakes at larger existing power plants; and (3) Phase III for structures at new offshore and coastal oil and gas extraction facilities, existing manufacturing facilities, and smaller existing power plants. Pet. App. 6a. In the absence of applicable Section 316(b) regulations in the interim years, cooling water intake standards have been relegated to *ad hoc* determination by individual permit writers – typically state agencies, exercising "best professional judgment" pursuant to 33 U.S.C. § 1342(a)(1)(B). See *Natural Resources Defense Council, Inc. v. EPA*, 863 F.2d 1420, 1424 (9th Cir. 1988).

c. In 2001, EPA promulgated its Phase I

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[9] These "phases" are entirely distinct from the two "phases" Congress contemplated for technology-based standards under Sections 301 and 304. See p. 12, *supra*.

regulations, which were mostly upheld in *Riverkeeper, Inc. v. EPA*, 358 F.3d 174 (2nd Cir. 2004). See 66 Fed. Reg. 65256 (2001). EPA promulgated its Phase II regulations, challenged here, in 2004. See Pet. App. 122a-593a. The Agency promulgated its Phase III regulations in 2006 (see 71 Fed. Reg. 35006), and a challenge to that rulemaking is currently pending. See *ConocoPhillips Co. v. EPA*, No. 06-60662 (5th Cir.).

B. Administrative and Judicial Proceedings Below

1. EPA Phase II Rulemaking

EPA's Phase II Section 316(b) rulemaking applies to cooling water intake structures with a design flow of at least 50 million gallons of water per day at existing power producing facilities subject to Section 301 of the Clean Water Act. Pet. App. 9a-10a (40 C.F.R. § 125.91)). EPA determined that closed-cycle cooling systems were not required and that a covered point source could meet the BTA standard by utilizing any of a "suite of technologies" capable of meeting national technology-based performance standards. *Id.* at 12a. These performance standards required that impingement mortality and entrainment be reduced for all life stages of fish and shellfish within specified numeric ranges (expressed as percentage reductions from a baseline), with some facilities exempted from the entrainment requirement. *Id.* at 12a-14a (40 C.F.R. § 125.94(b)).

The Phase II regulations established several compliance alternatives for achieving these standards. Pet. App. 10a (40 C.F.R. § 125.94(a)). The first included a reduction in flow commensurate with a closed-cycle recirculating system, which would be deemed sufficient to meet both impingement mortality and entrainment performance standards. *Id.* at 12a (§ 125.94(a)(1)(i)).

Another option was "a site-specific compliance alternative" that required a permitting authority to make a site-specific determination of BTA that is "as close as practicable" to national performance standards if a facility demonstrated that its compliance costs would be "significantly greater than the benefits of complying" with the performance standards. See *id.* at 14a (§ 125.94(a)(5)(i)).

2. Lower Court Decision

Both industry petitioners and environmental and state respondents petitioned for review of the EPA Phase II rulemaking, which was heard on direct review by the Second Circuit. The appellate court denied almost all industry challenges[10] and granted relief in response to all respondents' claims.[11] Pet. App. 1a-94a.

First, the court held that EPA had failed to explain adequately the basis of its rulemaking. The "record evidence alone * * * is oblique, complicated, and insufficient to permit us to determine what the EPA relied upon in reaching its conclusion." Pet. App. 35a;

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[10] The court rejected industry challenges to EPA's application of Section 316(b) to existing sources, definition of "adverse environmental impact," assumption of zero entrainment survival, lack of definition of "Great Lakes," and failure to account for the supposedly disproportionate impact on the nuclear industry. None of those rulings is affected by this Court's disposition of this case.

[11] Because the question presented by this case is distinct from most of these rulings in favor of respondents below, a remand to EPA is necessary regardless of the outcome in this case. Lower court rulings include that facilities cannot meet national performance standards based on use of restoration measures, that the ranges within EPA's national performance standards impermissibly allowed facilities capable of meeting higher standards to meet lower standards instead, and that there was inadequate notice of various other aspects of the rule.

see also *id.* at 33a ("difficult to discern from the record how EPA determined that the cost of closed-cycle cooling could not be reasonably borne by the industry").

Second, the court held that "the language of 316(b) itself plainly indicates that facilities must adopt the best technology available and that cost-benefit analysis cannot be justified in light of Congress's directive." Pet. App. 23a-24a (emphasis omitted). The court stressed, however, that EPA could take costs into account. The terms "best available" meant EPA should consider whether the costs of a particular technology could be "reasonably borne" by the industry. *Id.* at 24a. The court also made clear that if more than one technology achieves "essentially the same results," EPA can "appropriately choose the cheaper technology" on cost-effectiveness grounds. *Id.* at 27a.

On this same ground, the court faulted both EPA's rejection of the closed-cycle cooling option for national performance standards and its allowance of a site-specific cost-benefit compliance variance option. With regard to the former, the court ruled that it could not discern whether EPA had improperly relied on a cost-benefit comparison because, as previously described, the Agency had failed to articulate the basis of its decision. The court, accordingly, remanded to EPA for an adequate explanation of its decision. *Id.* at 32a, 36a-37a.

The court, however, squarely concluded that the cost-benefit variance option was invalid: "The Agency is * * * precluded from undertaking such cost benefit analysis because the BTA standard represents Congress's conclusion that the costs imposed on industry in adopting the best cooling water intake structure available * * * are worth the benefits in reducing adverse environmental impacts." Pet. App.

57a-58a. The court further noted how the site-specific cost-benefit compliance option directly contravened Congress's policy choice in the Act not to relax technology-based standards on the basis of local water quality. *Id.* at 58a.

SUMMARY OF ARGUMENT

The short answer to the question posed by this Court in granting certiorari is that Congress did not authorize EPA in Section 316(b) of the Clean Water Act to compare costs and benefits in determining the "best technology available for minimizing adverse environmental impact" of cooling water intake structures. Congress instead exercised its prerogative to answer that essential policy question itself by prescribing the extent to which both costs should be incurred and benefits should be achieved. And, Congress's deliberate decision to adopt a technology-based performance standard approach that precludes EPA from striking a different cost-benefit balance is entirely in keeping with the legislature's highly successful decision in 1972 to free the safeguarding of the nation's waters from the scientific and economic uncertainties inherent in the application of water quality standards.

A. To find the answer to the question posed by this Court, one need look no further than the plain meaning of Section 316(b)'s language. The statute provides that EPA must develop standards governing the design, location, construction, and capacity of cooling water intake structures that reflect the "best technology available for minimizing adverse environmental impact." Congress, accordingly, made clear the two defining touchstones for EPA's determination of this particular "best technology" standard. The technology

must be "available" and it must be the best of those available technologies for "minimizing adverse environmental impact." The former governs the extent to which costs can and must be tolerated, and the latter establishes the extent to which environmental benefits can and must be achieved consistent with those costs.

What is not left for EPA is any authority to reconsider how those costs and benefits should be weighed in comparison to each other. EPA can no more determine that the costs of available technology do not warrant the benefits of minimizing the adverse environmental impact than it can conclude that the benefits warrant a cost higher than that supported by available technology. Congress took both those inquiries off the table.

B. The Clean Water Act's overall structure confirms Section 316(b)'s plain meaning. Throughout the Act, Congress used precise and particular language to make clear to what extent costs and benefits could be considered by EPA in the establishment of various technology-based performance standards and when, in carefully limited contexts, any independent comparison by EPA of the relation of those costs to pollution control benefits would be permissible. Within that broader statutory context, Congress's contrasting failure to provide EPA with any such cost-benefit comparison authority in Section 316(b) is dispositive of the question presented in this case.

C. In the face of such clear statutory meaning, the legislative history need not be consulted. But, not surprisingly, that history fully corroborates the statutory text's plain meaning. What that history reveals is that the single most important policy issue facing Congress and the White House in 1972 was the

extent to which Congress should strike the cost-benefit balance itself or instead delegate such authority to EPA in the establishment of water pollution controls capable of meeting the nation's ambitious goals for protecting water quality. The Senate and House embraced sharply contrasting approaches and reached a compromise bill only after more than six months of conference committee deliberations on the precise statutory wording on the role of costs, benefits, and their comparison. The final bill repeatedly eliminated language in different sections that would have authorized EPA to engage in the kinds of cost-benefit comparisons petitioners here advocate.

Indeed, Section 316 itself expresses a clear congressional compromise directly relevant to the resolution of this case, based on the different policy approaches that Congress embraced in addressing the regulation of thermal discharges in Section 316(a) and cooling water intake in Section 316(b). For the former, Congress rejected a House proposal to authorize EPA to engage in cost-benefit analysis, but Congress did allow EPA to excuse compliance with a technology-based standard upon demonstration of achievement of a prescribed biologically-based standard. But for the latter, Congress required a strict technology-based approach under which Congress itself answered the question of how costs and benefits should be compared: the adverse environmental impact must be "minimized" by use of the "best technology available."

D. What EPA plainly cannot now do is write back into the statute the very wide-ranging authority to compare costs and benefits that Congress purposely denied EPA. Nor can this Court second-guess that legislative policy determination. The judgment of the court of appeals should be affirmed.

ARGUMENT

SECTION 316(b) OF THE CLEAN WATER ACT DOES NOT AUTHORIZE EPA TO DETERMINE THE "BEST TECHNOLOGY AVAILABLE FOR MINIMIZING ADVERSE ENVIRONMENTAL IMPACT" BASED ON THE AGENCY'S OWN COMPARISON OF THE COSTS AND BENEFITS OF POSSIBLE TECHNOLOGIES

We note at the outset that industry petitioners and the Solicitor General fundamentally disagree on the proper analytic framework for resolving the question presented.[12] Industry petitioners believe that Section 316(b)'s meaning is plain and unambiguously authorizes EPA to compare costs and benefits in establishing BTA. See Entergy Br. 31-32; UWAG Br. 31. The Solicitor General, however, contends that the statutory language "does not speak to the question presented" but is instead ambiguous. U.S. Brief 15. The Solicitor General nonetheless argues that EPA's view of Section 316(b) should be upheld as a reasonable interpretation of ambiguous statutory language. *Id.* at 15-23.

The Solicitor General is correct that the statute's plain meaning does not support industry petitioners' reading of Section 316(b). But the Solicitor General is wrong in contending that the language is ambiguous and can be reasonably construed to allow EPA authority to compare costs and benefits. The plain meaning, as

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[12] Because the Solicitor General on behalf of respondent EPA is aligned with industry petitioners on the question before this Court, general references in this brief to the "petitioners" will refer both to the Solicitor General and industry petitioners. Otherwise, these parties will be referred to separately as the "Solicitor General" and "industry petitioners."

evidenced by the language Congress used in Section 316(b), the statutory structure and purpose, and the legislative history, denies EPA any such authority, and the relevant statutory language cannot be reasonably construed to support the Solicitor General's position.

A. The Plain Meaning of Section 316(b) Makes Clear that Comparing Costs and Benefits Is Outside the Scope of EPA's Authority in Determining the "Best Technology Available for Minimizing Adverse Environmental Impact" of Cooling Water Intake Structures

1. Petitioners strive mightily to avoid the plain meaning of the words Congress actually wrote in Section 316(b) by seizing on a series of "sometimes" (U.S. Br. 16) meanings of the statutory language derived not from the primary, secondary, or even tertiary definitions of the relevant terms but from the octonary ones. They accordingly concoct an extraordinary reading of Section 316(b) that is boundless in its delegation of lawmaking authority to EPA:

> [T]he '*best* technology available for minimizing adverse environmental impact' may be the most suitable or desirable technology available for reducing such impact, to whatever extent the decisionmaker believes appropriate in light of competing values.

Entergy Br. 36.

"Best" is therefore stripped out of its statutory context to allow EPA to select the technology it prefers based on whatever factors it deems appropriate. See Entergy Br. 33; U.S. Br. 15-16. The statutory requirement that the technology be best "for minimizing

adverse environmental impact" is completely undone by the claim that the word "for" allows EPA to decide whether a particular technology is "suitable" or "appropriate" based on whichever factors it deems proper, wholly apart from the statutory requirement that adverse environmental impacts be "minimiz[ed]" by available technology. See U.S. Br. 16. And, finally, the "minimizing" standard itself is transformed into no more than a "reduction" aspiration that EPA is permitted to pursue while simultaneously pursuing other competing values of its choice. See U.S. Br. 17-18; Entergy Br. 34-35.

Contrary to petitioners' proffer, however, the role of a court in construing statutory language is not to determine its *strained* meaning, but its *plain* meaning. While discernment of the former might call for a journey into rarefied and unlikely uses of language, the latter is much simpler and therefore more judicial. It looks to the primary and ordinary meaning of the language Congress used in its context. Here, moreover, the ordinary meaning of the language at issue is wholly consistent with the primary definitions of all the relevant terms. Section 316(b) means exactly what it says.

a. First, the word "best" in no manner authorizes EPA to engage in wide-ranging cost-benefit analysis. The primary, ordinary meaning of "best" when used, as in Section 316(b), as an adjective is "surpassing all others in excellence." *The American Heritage Dictionary of the English Language* 173 (4th ed. 2000); see *Webster's Third New International Dictionary* 208 (1971) ("excelling or surpassing all others of its kind"); 2 *The Oxford English Dictionary* 139 (2d ed. 1989).

If, of course, Section 316(b) provided only that EPA

should determine the "best technology," without more, then petitioners might reasonably argue that Congress had delegated to EPA authority to determine what the technology should be "best" at accomplishing. But Section 316(b) does no such thing. The statute expressly dictates precisely what the technology must be best "for": "minimizing adverse environmental impact."

b. Here too, the meaning of "for" is clear and we need look no further than its primary meaning: "used to indicate the object, aim, or purpose of an action or activity." *The American Heritage Dictionary*, *supra*, at 686. The Solicitor General's desperate seizure of an eighth meaning in support of its claim that the word "for" instead confers on EPA broad discretion to decide whether technology is "suitable" or "appropriate" is self-refuting. See *The American Heritage Dictionary*, *supra*, at 686 (8th definition); 6 *The Oxford English Dictionary*, *supra*, at 24 (13th definition); Edwin B. Williams et al. eds., *The Scribner-Bantam English Dictionary* 356 (1977) ("appropriate" listed as the 18th definition). And, in all events, the statutory language prescribes precisely what the technology must be suitable for: minimizing adverse environmental impact.

c. Nor is there any more merit in petitioners' contention that the word "minimizing" merely calls for EPA "to reduce" based on the Agency's own balancing of the value of such reduction compared to other competing values. As EPA originally recognized in 1976 (see 41 Fed. Reg. 17388 (J.A. 41)), the ordinary definition of "minimize" in its statutory context is "to reduce to the smallest possible amount, extent, size, or degree" and not simply "to reduce." *The American Heritage Dictionary*, *supra*, at 1119; 9 *The Oxford English Dictionary*, *supra*, at 815; *Webster's Third New International Dictionary*, *supra*, at 1438.

Even more fundamentally, the plain meaning of "minimizing" does not contemplate a balance at all, let alone a cost-benefit comparison. The purpose of a cost-benefit balance is not to minimize adverse environmental impact, but to determine the permissible environmental impact based on the wholly different policy premise that the cost of reduction should not be greater than the corresponding benefits. A "minimizing" standard permits no such comparison.

Nor, of course, does the "minimizing" requirement mandate that one must reduce at all costs. Where, as with Section 316(b), the statute further provides that the technology must be "available," that separate requirement ensures that costs are considered in determining whether the technology is available. But, consideration of costs is a far cry from a cost-benefit comparison.[13]

d. There is, to be sure, some potential ambiguity in terms of what the word "available" means – in particular, whether it extends beyond physically available to include economically available. See *The American Heritage Dictionary*, *supra*, at 123 ("present and ready for use; at hand; accessible"); *Webster's Third New International Dictionary*, *supra*, at 150 ("accessible or may be obtained"). The Second Circuit held that the term "available" allows EPA to consider costs in determining whether a particular technology is feasible for a particular category of facilities. This has long been

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[13] Petitioners repeatedly conflate the two, suggesting that the issue here is whether EPA can consider costs under Section 316(b) and further suggesting environmental respondents contend EPA cannot do so. We make no such claim, and that is not the issue before the Court, which is limited to EPA's authority to undertake cost-benefit comparisons.

EPA's view, and we do not dispute that threshold proposition. But permitting EPA to consider economic feasibility in determining whether a given technology is "available" on a categorical basis is wholly different from permitting the Agency, contrary to the statute's plain terms, to decide that the costs of such technology, while economically feasible for an industry, do not warrant "minimizing adverse environmental impact."

2. The only limitation on the extent of benefits to be achieved, therefore, is the cost of available technology. The statute leaves no room for EPA to conclude that those benefits are not worth the costs of available technology. Nor does the statutory language, conversely, authorize EPA to conclude that the benefits to be obtained warrant expenditures even higher than those called for by available technology. Both those policy inquiries are outside the bounds of congressionally delegated lawmaking authority under Section 316(b).

The Solicitor General's contrary argument rests on a false syllogism. He argues that because Congress authorized EPA to consider costs and to consider benefits, the legislature must be deemed to have authorized the Agency to compare the two. See U.S. Br. 30. But that is precisely what Congress did not do. And, deliberately so.

Congress instructed EPA to consider the costs in order to ensure "availability." And the legislature likewise instructed the Agency to consider the benefits in order to ensure that environmental impact was minimized. But Congress did not permit EPA to second-guess the legislative judgment that environmental impact must be minimized with available technology by authorizing the Agency to weigh the benefits of the

former against the costs of the latter. "Congress itself defined the basic relationship between costs and benefits * * *" (*American Textile Manufacturers Institute, Inc. v. Donovan*, 452 U.S. 490, 509 (1981)) and did not leave it to EPA to decide what value to assign to these competing interests. *Cf. Dept. of Revenue, Kentucky v. Davis*, 128 S. Ct. 1801, 1821 (2008) (Scalia, J., concurring in part) ("Of course you cannot decide which interest 'outweighs' the other without deciding which interest is more important to you.").

3. Petitioners dangle the usual parade of absurd results they claim will result from reading Section 316(b) based on its plain meaning. None has credence. Although Section 316(b)'s plain meaning defeats petitioners' claim that EPA can compare costs and benefits in determining BTA, EPA retains discretion to administer Section 316(b) in a manner that is both consistent with congressional intent and capable of avoiding petitioners' proffered horribles.

a. For example, Section 316(b)'s denial of any authority to EPA to compare costs and benefits in determining BTA does not mean that EPA lacks any discretion in determining which "adverse environmental impact" must be minimized. Many of petitioners' proposed absurdities are rooted in the notion that EPA is authorized to minimize only entrainment and impingement (which EPA found to be the "primary, harmful environmental effects" that specific technologies can reduce (Pet. App. 234a)), and EPA can give no regard to other kinds of possible adverse environmental impacts related to the location, design, construction, and capacity of cooling water intake structures. Nothing in the plain meaning of Section 316(b), however, compels such an illogical result. Indeed, the Second Circuit acknowledged EPA's

authority to consider also energy efficiency and other environmental impacts. See *Id.* at 26a-27a n.12.[14]

b. Nor is there any merit to the absurd result most often repeated by petitioners and their amici: the specter of industry paying billions of dollars to save one fish (or trillions to save one hapless individual plankton). Although the meaning of "minimizing" is plainly not merely to reduce, it is also just as plainly not so constricted as to require EPA to require industry petitioners to spend billions to save one more fish or plankton. Certainly nothing in the plain meaning of the terms "minimizing adverse environmental impact" compels EPA to establish its BTA standards as precise single-number limitations without any flexibility or margin of error. Just as in other legal contexts, there can be *de minimis* differences. And, the Agency has some discretion (albeit not boundless) to determine that further differences in reduction would be so minor as to be unnecessary for compliance with the minimizing requirement. Petitioner UWAG acknowledges this critical point: "Minimizing adverse environmental impact" is "indisputably broad enough to authorize EPA * * * to decide at what point [impacts] have been 'minimized.'" UWAG Br. 45. We agree.

Hence, if the reduction in adverse environmental impact to be gained from an "enormously expensive" technology would be without "any meaningful environmental consequence" (Entergy Br. 50), with "no

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[14] The full range of "adverse environmental impacts" EPA can consider and the weight each is assigned are not before the Court because they present questions distinct from EPA's authority to compare costs and benefits. Prudence supports deferral of their resolution to a case where, unlike here, they are squarely and necessarily presented.

corresponding environmental benefit" (API Amicus Br. 4), or "identical" to much less expensive measures (American Chemistry Council Amicus Br. 8), Section 316(b) would not compel adoption of the more expensive technology because impacts will have already been minimized by the less expensive technology.

It would not, for this same reason, require a facility that withdraws cooling water from a water body with no aquatic organisms at all – a completely implausible scenario – to implement expensive controls to meet BTA. See Entergy Br. 50. Section 316(b) does not, after all, require EPA to order that a certain technology be used, but permits the Agency instead to establish performance standards that reflect the use of available technology. In the Phase II rule, EPA did just that, expressing the performance standards as percentage ranges for the reduction of impingement mortality and entrainment. If a water body has no aquatic life and therefore a facility has no adverse environmental impact, then it should be able to meet such a performance-based standard without the need for the expensive controls that would be necessary for facilities in other areas. In that (unlikely) scenario, run-of-the-mill technology would protect exactly the same number of fish (and therefore have the same environmental impact) as state-of-the-art technology, and satisfy the environmental performance standard.[15]

In other ways, EPA possesses discretion to announce a standard that satisfies the minimization of

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[15] But, of course, if the intake structure's past operations are the reason for the current lack of aquatic organisms, which would return in significant amounts upon intake reduction, then one could not posit that the continued withdrawal of large volumes of water is having no "adverse environmental impact."

adverse environmental impact requirement without adopting a one-size-fits-all rule. As the court below explained, in doing so EPA retains discretion to decide that the minimization requirement does not mandate some precise numerical reduction ("identically effective") but can be satisfied by a reduction within a prescribed range or, presumably, by not harming more than a prescribed amount. Pet. App. 28a. Cost-benefit comparison authority is not necessary to achieve this sensible end.[16]

c. Finally, equally unavailing are the absurd hypotheticals that petitioners advance based on the supposition that EPA is always required to make BTA determinations on the broadest categorical basis conceivable. Thus, petitioners claim that our suggested reading of Section 316(b)'s terms means that EPA will be forced to ignore any and all differences among facilities and their locations. See UWAG Br. 43-50;

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[16] That is why the court did not rule below (Pet. App. 38a-44a), nor did we argue, that EPA was precluded from using any ranges in its BTA national performance standards describing the reduction of adverse environmental impact to be achieved. The problem with EPA's ranges in its Phase II rulemaking was not the mere fact that they were ranges, but that the rule allowed facilities fully capable of achieving performance near the upper end of the range to choose technology to meet only the lower end. *Id.* at 43a. For this same reason, moreover, regardless of the Court's disposition of the question presented in this case, the Court should reject the claim of the Solicitor General (Br. 39 n.3) and Entergy (Br. 58-59) that this Court should also reverse the lower court's ruling on the validity of EPA's ranges. The Second Circuit's invalidation of those ranges rested on a legal ground distinct from the cost-benefit question now before the Court, petitioners chose not to petition on that distinct issue, and they should not be allowed now to "smuggle additional questions into a case before [the Court] after the grant of certiorari." *Norfolk Southern Railway Co. v. Sorrell*, 127 S. Ct. 799, 805 (2007).

Nuclear Energy Institute Amicus Br. 22-25; Nebraska, et al. Amicus Br 8-10.

Petitioners and their amici are confusing distinct issues and trying to inject a legal issue into the case not in fact presented. Whether EPA can compare costs and benefits in determining BTA and whether EPA can determine BTA based on site-specific, narrow, or broad categorical bases present different legal issues.[17] We do not deny, moreover, that the language of Section 316(b), focusing on features such as "location, design, construction, and capacity," naturally lends itself to tailored agency regulation based on less broad categories. And, we did not challenge in this case several aspects of the Phase II rule that drew distinctions based on considerations such as location. See, *e.g.*, 40 C.F.R. § 125.94(b)(2)(ii)(A) (2007) ("Your facility uses cooling water withdrawn from a tidal river,

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[17] Industry petitioners and their amici insist that the only sensible approach is site-specific, not categorical, determinations of BTA performance standards. Entergy Br. 46-48; UWAG Br. 7-10,45-57; Nuclear Energy Institute Amicus Br. 4, 22-25; Nebraska, et al. Amicus Br. 8-10. The sole question presented in this case, however, is whether EPA can compare costs and benefits in setting BTA standards under Section 316(b), and the answer to that question does not depend on whether EPA is making its BTA determination on a categorical (whether broadly or narrowly drawn) or site-specific basis. The extent of EPA's discretionary authority to make determinations on site-specific grounds or on a narrow rather than broad categorical basis is an entirely distinct issue (see *Chemical Manufacturers Ass'n v. NRDC*, 470 U.S. 116, 131 (1985); *E.I. du Pont de Nemours & Co. v. Train*, 430 U.S. 112, 126-129 (1977)) and, in the context of Section 316(b), is at issue now in the Fifth Circuit's review of EPA's Phase III regulations. See *ConocoPhillips Co., et al. v. EPA*, No. 06-60662 (5th Cir.). Here again, industry petitioners should not be allowed to inject new questions not fairly presented by the Court's grant of review. See note 16, *supra*.

estuary, ocean, or one of the Great Lakes * * *") (Pet. App. 560a); *Id.* § 125.94(b)(2)(ii)(B) ("Your facility uses cooling water withdrawn from a freshwater river or stream * * *") (Pet. App. 560a).

Of course, as always, EPA's discretion here is not boundless, because otherwise EPA could too easily subvert the technology-forcing aspect of the BTA standard. But that limit's outer bounds are not implicated by this case. For the purposes of this case, it should be sufficient to note that none of the arguments we present as to Section 316(b)'s plain meaning on the question in fact presented in this case compels the crabbed reading of EPA's authority upon which petitioners' projected absurdities depend.

In sum, there is nothing absurd about applying Section 316(b) according to its plain terms. Section 316(b) may well be Herculean in its ambition, but there is nothing "Sisyphean" in the tasks it assigns. Entergy Br. 52.

B. The Statutory Structure and Context Confirm Section 316(b)'s Plain Meaning

The Clean Water Act's statutory structure and context confirm Section 316(b)'s plain meaning by underscoring the deliberate and limited way Congress chose to authorize EPA to relate costs to benefits in the establishing of environmental protection standards under the Act. "Where Congress includes particular language in one section of a statute but omits it in another * * *, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion." *Keene Corp. v. U.S.*, 508 U.S. 200, 208 (1993), *quoting Russello v. U.S.*, 464 U.S. 15, 23 (1983); see *Allison Engine v. U.S. ex rel. Saunders*, 128 S. Ct. 2123, 2129 (2008).

When Congress passed the Clean Water Act in 1972, it displayed a striking reluctance to authorize EPA to base its determination of environmental performance standards on a comparison of costs and benefits. As previously described (see pp. 6-8, *supra*), Congress deliberately severed the determination of those performance standards from a showing of water quality impacts because of the tremendous scientific and economic uncertainties associated with measuring and assessing those impacts. The Act mandated that EPA promulgate a series of demanding requirements, yet expressly authorized EPA to compare costs and benefits in determining the degree of controls to be imposed in only two extremely limited circumstances.

1. First, Congress authorized EPA to compare costs and benefits in the promulgation of one technology-based effluent limitation. Section 304(b)(1)(B) provided that among the factors that EPA shall consider in determining BPT is the "total cost of application of technology in relation to the effluent reduction benefits to be achieved * * *." 33 U.S.C. § 1314(b)(1)(B). The only other instance in 1972 when Congress expressly called for a direct cost-benefit comparison was in providing for an exemption from the application of water quality based effluent limitations that are more stringent than technology-based effluent limitations under Section 302. See Pub. L. 92-500, § 302, 86 Stat. 846 (1972) (subsequently amended). Under that provision, EPA cannot apply any such more stringent standard to a person who demonstrates that "there is no reasonable relationship between the economic and social costs and the benefits to be obtained * * *." *Id.* § 302(b)(2). Neither of these examples advances petitioners' cause.

a. In 1972, when Congress created the BPT

standard, Congress made clear its intent to phase BPT out and replace it no later than 1983 with a different technology-based standard, BAT, that was designed to be more stringent than BPT and lacked any comparable allowance for EPA to relate costs and benefits in its determination. Indeed, this Court has noted the contrast between the statutory language used for BPT and BAT, the absence of any cost-benefit language for BAT, and Congress's obvious desire not to authorize EPA to engage in such a comparison in determining BAT. See *Crushed Stone*, 449 U.S. at 71 ("in assessing BAT total cost is no longer to be considered in comparison to effluent reduction benefits").

Petitioners and their amici ignore the clear import of the congressional decision to provide for limited cost-benefit analysis in determining BPT for a few years and to eliminate any such analysis in BAT's determination by asserting that the only difference between BPT and BAT is that the Agency is *required* to engage in limited cost-benefit analysis for the former and *permitted* to do so for the latter. See U.S. Br. 21, 24; Entergy Br. 39-40; UWAG Br. 35-36; ACC Amicus Br. 22-23. Their primary textual support for this extraordinary claim is the inclusion in Section 304(b)(2)(B), which lists the factors EPA is to consider in determining BAT, of a final clause referring to "such other factors as the Administrator deems appropriate." 33 U.S.C. § 1314(b)(2)(B).

That clause cannot, however, be reasonably construed to completely upend the selective and deliberate manner in which Congress had otherwise carefully prescribed the precise extent to which costs and benefits could be considered, and when, if ever, the Agency was empowered to compare one to the other. There is not even a hint of support in the text or

legislative history of the clause for petitioners' radical notion that the only policy dispute separating the House and Senate was whether EPA would be *required* to engage in cost-benefit analysis, including assessment of water quality impacts, rather than *authorized* to do so.[18]

Just the opposite is true. As this Court has previously noted, the legislative history leaves no question that Congress intended for BAT to be more stringent than BPT, and the absence of authority to engage in cost-benefit analysis consideration in determining BAT was a major basis for that intended difference. The Court described in *Crushed Stone* how the statute sets forth "[s]imilar directions" for the determination of BPT and BAT in Sections 304(b)(1)(B) and 304(b)(2)(B) with the single exception that "in assessing BAT total cost is no longer to be considered in comparison to effluent reduction benefits." 449 U.S. at 71; see 1 *Leg. Hist.* 170 (statement of Senator Muskie) ("In making the determination of 'best available' for a category or class, the Administrator is expected to apply the same principles involved in making the determination of 'best practicable' (outlined above) *except as to cost-benefit analysis.*") (emphasis supplied).

In light of the contrasting language and the clear congressional purpose to ensure that BAT was "more stringent" than the "more modest" BPT (*Chemical Manufacturers Ass'n*, 470 U.S. at 118; *Crushed Stone*, 449 U.S. at 75 n.14), it is beyond any notion of plausibility to construe the final clause in Section

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[18] The difference between petitioners' notion of mandate versus permission is also likely illusory. If, as petitioners contend (Entergy Br. 31), EPA is permitted to compare costs and benefits, no doubt industry petitioners would also argue that EPA would be acting arbitrarily and capriciously by not doing so.

304(b)(2)(B) as, in effect, permitting EPA to inject back into the BAT determination any factor of its choosing, including presumably cost-benefit analysis even more forgiving than that provided for in Section 304(b)(1)(B) for BPT.[19] "Congress * * * does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions – it does not, one might say, hide elephants in mouseholes." *Whitman v. American Trucking Ass'ns*, 531 U.S. 457, 468 (2001); *Gonzalez v. Oregon*, 546 U.S. 243, 274 (2006). It is significant in this regard that the language of this final clause was not added during the lengthy Senate and House conference discussions, but was included in the original Senate bill, which eschewed providing EPA with the kind of open-ended authority petitioners nonetheless claim here. See S. 2770 §§ 304(b)(1)(B) & 304(b)(2)(B), 2 *Leg. Hist.* 1615 ("and such other factors as the Administrator deems appropriate").[20]

b. Section 302 is likewise unavailing to petitioners. It requires EPA to undertake a cost-benefit comparison, but not for the purpose of relaxing compliance with a technology-based standard, let alone for determining such a standard. See Pub. L. 92-500, § 302, 86 Stat. 846. Instead, costs and benefits are compared under Section 302 only for the very different purpose of relaxing application of a *water quality standard* that is

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[19] Of course, whatever its meaning, in no event is the language of Section 304(b)(2)(B) part of Section 316(b). The Solicitor General is correct that "[t]he only direct consequence of the cross-reference [in Section 316(b) to Sections 301 and 306] is a procedural one," indicating which standards must require BTA for cooling water intake structures. U.S. Br. 18-19.

[20] For a further refutation of petitioners' claim on this issue, see Environmental Law Professors Amicus Br. II.B; Environment America Amicus Br.

more stringent than a technology-based standard if there is "no reasonable relationship" of costs to benefits. § 302(b)((2). Such a differently-directed provision provides no support for petitioners' suggestion that Congress intended to confer authority on EPA in Section 316(b) to compare costs and benefits in determining BTA.[21]

c. Nor are petitioners supported by the two instances in which Congress in 1972 authorized EPA to take water quality impact into account as a possible basis for relaxing a technology-based standard. The first allows for a modification of BAT for individual sources for which compliance cost is particularly onerous so long as the source demonstrates further reasonable progress toward discharge elimination. See 33 U.S.C. § 1311(c). The second, Section 316(a), applies to thermal discharges and allows for an exemption from a technology-based effluent limitation upon a showing that its application is not necessary to meet statutorily-described fish population objectives. Neither of these narrowly-drawn provisions, however, contemplates EPA's undertaking a cost-benefit comparison or otherwise authorizes EPA to determine how the cost-benefit balance should be struck. In each, Congress declared how the balance should be struck. Both accordingly provide further reason for believing that

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[21] Indeed, a parenthetical within Section 302 made clear that Congress assumed that technology-based standards were not based on cost-benefit comparisons. The parenthetical provides that the lack of a reasonable cost-benefit relationship is grounds for relaxing the water-quality-based effluent limitation "whether or not such technology * * * [is] available," further underscoring Congress's belief that a technology could be "available" even absent a reasonable relationship between costs and benefits. Pub. L. 92-500, § 302(b)(2).

Congress did not intend to provide EPA with sweeping authority to engage in cost-benefit comparisons in the absence of express legislative authorization. Perhaps that is why the Solicitor General fails even to acknowledge Section 316(a)'s existence in his brief.

2. Petitioners and their amici also mistakenly rely on a host of other Clean Water Act provisions in an effort to buttress their argument that Congress intended, with statutory silence, to authorize EPA to compare costs and benefits in determining BTA. Hence, they point out the Act also provides for :

- A technology-based standard for conventional pollutants that, like BPT, allows for some consideration of the relationship of costs and benefits (33 U.S.C. § 1314(b)(4)(B)); see U.S. Br. 20; Entergy Br. 39; ACC Amicus Br. 19); and
- A series of variances for:
  - Some pollutants to allow their control to be reduced from BAT to BPT (33 U.S.C. § 1311(g); see U.S. Br. 21; UWAG Br. 47; Entergy Br. 43-44);
  - Some kinds of discharges into deep waters or marine waters (33 U.S.C. § 1311(h)&(m); see Entergy Br. 36); and
  - Some discharges of toxic pollutants subject to BAT standards (33 U.S.C. § 1311(n); see Entergy Br. 44-45).

None of these provisions, however, aids petitioners' claim on the issue presented. First, Congress added each of these provisions long after 1972 and the

question in this case is what Congress intended *in 1972*, when it enacted Section 316(b), and not in later years when it changed other provisions of the Clean Water Act unrelated to Section 316(b). No less important, each of these provisions demonstrates that Congress continued after 1972 to take extreme care and to act with great precision in deciding when to authorize EPA to compare costs and benefits either in establishing environmental performance standards or excusing facilities from compliance with such standards.

For instance, the reason Congress decided to create the BCT standard was that, contrary to petitioners' submission here, Congress understood that the BAT standard is "not subject to any test of cost in relation to effluent reduction benefits or any form of cost/benefit analysis" and that "in establishing limitations for conventional pollutants * * * the best available technology may not be the most appropriate technology in terms of the relationship of the cost of achieving a particular level of reduction and the amount of reduction actually achieved." 3 *Legislative History of the Clean Water Act of 1977 – A Continuation of the Legislative History of the Federal Water Pollution Control Act Amendments of 1972*, 427 (Committee Print compiled for the Senate Committee on Environment and Public Works by the Library of Congress), Ser. No. 95-14 (1975) (hereinafter " 3 *Leg. Hist.*") (statement of Senate Manager Senator Muskie). For this reason, and for conventional pollutants only, Congress amended the Act to include the same kind of limited cost-benefit analysis already available in BPT as part of the basis for determining BCT: to ensure that costs for one narrow class of pollutants did not increase "beyond the 'knee of the curve,' the take-off point where incremental costs begin to exceed incremental benefits." *Id.* at 330

(statement of House Manager Rep. Roberts).

So, too, some of the justifications that Congress gave for making subsequent changes in the law to provide for additional variances in narrowly-defined circumstances mirror some of the arguments petitioners advance now before this Court. See, *e.g.*, 3 *Leg. Hist.* 258 (Conference Report) (new variance in "recognition that there are some coastal areas of the United States * * * where natural factors provide *** sufficient elimination of traditional forms of pollution"). But, of course, that is precisely why the subsequent amendments upon which petitioners rely cut against petitioners' position. They demonstrate the correct way to change the law if one believes, as petitioners plainly do, that statutory provisions enacted in 1972 may be unduly harsh in some possible application. No doubt petitioners are disappointed that their efforts to date to persuade Congress have been unsuccessful. See, *e.g.*, H.R. Rep. No. 112 104th Cong., 1st Sess. Pt. 1, at 27-28 (1995) (H.R. 961, § 318, proposing to amend Section 316(b) to allow for consideration of "[t]he relative environmental, social, and economic costs and benefits"). But such failure before Congress provides no basis for crossing the street and seeking relief from this Court.

3. Finally, there is no merit to petitioners' contentions that the ruling below relied on a "plain statement rule" disfavoring cost-benefit analysis or somehow contravened this Court's decision in *Chevron v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984), by failing to treat statutory silence as establishing ambiguity. See U.S. Br. 30-32; Entergy Br. 24, 26 n.8.

a. First, neither environmental respondents nor

the Second Circuit relied on any "plain statement rule" that disfavors in all contexts a conclusion that Congress has authorized an agency to engage in cost-benefit comparison. Like the court below, we contend only that the meaning of the words Congress has chosen depends on their statutory context and whether that context makes it more or less likely that Congress intended a particular result in the absence of an express statement one way or the other. See, *e.g., Dolan v. Postal Service*, 546 U.S. 481, 486 (2006); *Davis v. Michigan Dept. of Treasury*, 489 U.S. 803, 809 (1989). That is why "'[i]t is generally presumed that Congress acts intentionally and purposely' when it 'includes particular language in one section of a statute but omits it in another.'" *City of Chicago v. Environmental Defense Fund*, 511 U.S. 328, 338 (1994).

This Court has applied this reasoning repeatedly in construing statutes, including in cases where the question relates to the agency's authority to compare costs with benefits (*American Textile Manufacturers Institute, Inc. v. Donovan*, 452 U.S. at 510) or even to consider costs at all (*Union Electric Co. v. EPA*, 427 U.S. 246, 257 n.5 (1976)). Of particular relevance, the Court did so most recently in *Whitman v. American Trucking*, in determining whether Congress intended to authorize EPA to consider compliance costs in establishing air quality standards under the Clean Air Act. The Court "refused to find implicit in ambiguous sections of the Clean Air Act an authorization to consider costs that has elsewhere, and so often, been expressly granted." 531 U.S. at 467. The same reasoning applies here. See 531 U.S. at 468-69 ("The implausibility of Congress's leaving a highly significant issue unaddressed (and thus 'delegating' its resolution to the administering agency) is assuredly one of the factors to be considered in

determining whether there is ambiguity.").

b. Nor is there any tension between relying on Section 316(b)'s plain meaning and *Chevron*. A statute is not "silent" for *Chevron* purposes whenever the statutory language does not expressly address the precise legal question at issue. The Clean Air Act in *American Trucking* did not have to provide expressly that EPA could not consider costs in establishing national ambient air quality standards for the Act to have a plain meaning. Nor did the Resource Conservation and Recovery Act in *City of Chicago v. Environmental Defense Fund* have to provide expressly that a particular ash residue was not exempt from hazardous waste regulation for that Act to have a plain meaning. In light of the statutory language and structure, the absence of an express exemption was what mattered. 511 U.S. at 334-35. The same is true here.

C. EPA's Implementation of Section 316(b) Does Not Defeat Its Plain Meaning

1. Petitioners claim that the lower court's plain meaning interpretation cannot be squared with EPA's interpretation of Section 316(b) over the last thirty years. See U.S. Br. 27, UWAG Br. 15, 37, 41. They are mistaken. Contrary to their characterization of EPA's past practice, until the rulemaking at issue in this case, EPA did not claim the authority to inject a wide-ranging cost-benefit analysis into standard setting under Section 316(b). Indeed, EPA had denied, rather than claimed, such authority, and its current rulemaking finds no historical precedent.

When EPA first faced the question presented in this case in the original 1976 rulemaking designed to implement Section 316(b), it flatly rejected industry's

claim that cost-benefit analysis was required (see 41 Fed. Reg. 17388) and, even more important, did not leave any room for petitioners' claim that the Agency was addressing only whether such analysis was "required" rather than "permitted." See UWAG Br. 38-39. EPA then explained that cost-benefit analysis was not appropriate because "[t]he statute *directs* the Agency to insure that enumerated aspects of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact." 41 Fed. Reg. 17388 (emphasis supplied). Accordingly, "[o]nce such adverse effects have been identified * * *, then the effort *must* be to select the most effective means of minimizing (*i.e.*, 'reducing to the smallest possible amount or degree') those adverse effects." *Id.* (emphasis supplied). See J.A. 41.

To be sure, in the years between the judicial rejection of EPA's initial rulemaking and the Agency's promulgation of the rules challenged here, EPA did claim that the Clean Water Act allowed permitting agencies in individual permit proceedings to apply a "wholly disproportionate" test in fashioning requirements applicable to a particular cooling water intake structure. See, *e.g.*, U.S. Br. 5, 27-28. We do not read this past Agency administrative practice as supporting EPA's now far more expansive claim of cost-benefit analysis authority under Section 316(b) or as necessarily inconsistent with our own view of Section 316(b)'s plain meaning.

a. As conceded by the Solicitor General, EPA's newly-claimed cost-benefit authority has a greater "extent" and is "less stringent" than the narrow "wholly disproportionate" test applied by EPA and state agencies in individual permitting decisions. U.S. Br. 5, 27, 41 n.5. In no manner is EPA's current claim of

authority to engage in cost-benefit analysis under Section 316(b) supported by 30 years of administrative practice. U.S. Br. 27; Entergy Br. 23; UWAG Br. 37.

b. Moreover, the wholly disproportionate test is not necessarily, in proper application, inconsistent with Section 316(b)'s plain meaning – so long as it is applied only when the cost is considered "wholly disproportionate" because there are only *de minimis* environmental benefits to be gained by the further expenditures. In that circumstance, Section 316(b)'s plain meaning would be satisfied because EPA could reasonably conclude that the "adverse environmental impact" had already been minimized. See pp. 29-30, *supra*. Indeed, that is all EPA did in the permitting decision in *Seacoast Anti-Pollution League v. Costle*, 597 F.2d 306, 311 (1st Cir. 1979), on which petitioners and their amici repeatedly rely. See UWAG Br. 41; U.S. Br. 27; Entergy Br. 57 n.25.[22] There, EPA concluded that a huge increase in cost was not warranted by an insubstantial additional reduction in adverse environmental impact on juvenile smelt or flounder larvae. 597 F.2d at 309-311. Such reasoning is no different from the Second Circuit's ruling below that Section 316(b) permits EPA to decline to require the expenditure of higher compliance costs when the adverse environmental impact to be achieved is "essentially the same" as that obtained by a lower cost option. See Pet. App. 26a.

Significantly, EPA's understanding that it lacked authority to compare costs and benefits under Section

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[22] Contrary to industry petitioners' claims, the First Circuit did not uphold the "wholly disproportionate" test, nor was it asked to pass on it, as the Solicitor General acknowledges. See U.S. Br. in Opp. 13.

316(b) continued through its Phase I rulemaking, long after its announcement of a wholly disproportionate test. In that rulemaking, the Agency made clear that it "ha[d] not selected the best technology available on a cost-benefit basis," but on the basis of technological and economic feasibility, an approach "analogous to the economic achievability analysis it conducts for other technology-based rules under sections 301 and 306 * * *." 66 Fed. Reg. 65309 (2001). And, the site-specific variance EPA included in the Phase I rule was based on compliance costs "wholly out of proportion to the costs EPA was considering in establishing the requirement at issue" and therefore was a *cost-cost* variance, not a *cost-benefit* variance. 40 C.F.R. § 125.85.

2. In all events, even if EPA had in the past applied a "wholly disproportionate" analysis more broadly, any such practice would have no significant bearing on the resolution of this case. The first reason is that EPA was not in any of those individual permitting proceedings interpreting Section 316(b) in a manner, such as a notice-and-comment rulemaking, entitled to *Chevron* deference. Since EPA's initial Section 316(b) regulation was struck down on procedural grounds, EPA has merely been filling the existing regulatory gap during permitting as provided for by Section 402(a)(1)(B). 33 U.S.C. § 1342(a)(1)(B).

The second reason is even more fundamental. In no event can an agency administrative practice trump a statute's plain meaning. That is what this Court meant when it said in *Chevron* that if the meaning of the statutory language is plain, "that is the end of the matter." 467 U.S. at 842-43.

D. Resort to Legislative History Is Unnecessary in this Case, but Its Examination Reinforces Section 316(b)'s Plain Meaning

Given the statutory language's plain meaning, as buttressed by its structure and context, examination of the legislative history is unnecessary. Only because petitioners nonetheless purport to proffer some legislative history in support of their claim, we offer further discussion for those interested.

1. To support their claim, petitioners seize upon an isolated floor statement by a single member of Congress who describes the Section 316(b) standard in terms of "practicability." Indeed, EPA in its rulemaking effectively treats this statement as though its words were the statutory language. Pet. App. 252a. In no event can this statement support the weight petitioners claim.

Whatever one thinks of legislative history, it can never *add* words to the statute, let alone significant ones. But, that is precisely what petitioners seek to do. They want to add to Section 316(b) the word "practicable," which nowhere appears in the statutory provision. And, then, once added, they want to claim that this same word is of enormous substantive import.

2. A more in-depth examination of Section 316(b)'s historical origins, moreover, leaves no doubt that Congress intended the meaning that is plain on the face of the statute. As described above (see pp. 6-14, *supra*), in drafting the statute in 1972, the legislators engaged in intense and protracted debate on the extent to which EPA should be authorized to consider costs and also to relate costs to benefits in establishing environmental protection standards. This dispute went to the core of the legislative policy debate.

a. The Senate and House initially had sharply contrasting views on the issue, with the Senate favoring a technology-based approach that denied EPA such authority and the House favoring a water quality approach that provided for such agency authority. Following months of debate and precise drafting, the two chambers finally reached agreement on a bill that adopted the Senate approach in almost all significant respects and, even then, had to override a veto triggered by the President's concerns about costs and benefits. The formal legislative history, especially the accompanying legislative reports, makes clear the dramatic new direction that Congress ultimately embraced. The legislators completely revamped the federal water quality protection program in every significant respect, including its primary reliance on application of water quality standards. See *EPA v. California State Water Resources Control Board*, 426 U.S. at 202. The less formal history, including the numerous documents prepared by members of Congress and committee staff leadership during the conference proceedings – draft statutory language, memoranda, and notes on meetings – tells the same story, only in greater detail. See notes 6-8, *supra*.

The final legislative enactment rejected a series of House proposals to confer on EPA the authority to engage in a comparison of costs and benefits in determining environmental protection standards. Congress rejected providing EPA with such authority in determining BAT (see p. 9, *supra*); in determining whether BAT would even apply (*id.* at 9-10); in determining BDT for new sources (*id.* at 10); and in determining controls on thermal discharges (*id.* at 12-13). Such a consistent manifestation of congressional intent to refuse to enact language that would have

provided EPA with general authority to compare costs and benefits leaves no room for petitioners' effort to read such authority back into the statute by way of strained and unnatural readings of the words of the law Congress did pass.

b. Not surprisingly, the drafting history of Section 316(b) is in full accord. As previously described (see pp. 5-6, 12-13, *supra*), Congress became aware of the cooling water intake issue at first because of its relationship to the thermal discharge issue. Congress ultimately decided to break the two apart into two distinct subsections. But, although the House ultimately prevailed in its effort to allow for a biologically-based exception to the application of technology-based requirements in Section 316(a) – "the pro[t]ection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife" (33 U.S.C. § 1326(a)) – the compromise the conferees finally struck in the closing days of the conference did not include a similar exemption in Section 316(b), let alone the sweeping cost-benefit comparison authority EPA now seeks to assert. See note 8, *supra*. Instead, Section 316(b) demanded a technology-based standard that would "minimiz[e] adverse environmental impact" using "best technology available" and, unlike Section 316(a), would not relax that standard based on achievement of a statutorily-prescribed biological standard. The final bill also rejected the original House proposal for Section 316(a), which would have broadly authorized EPA to consider the "relative costs and benefits" of control options and to exempt a source if the costs bore "no reasonable relationship to the economic and social benefits." H.R. 11896, § 316(b)&(d), 1 *Leg. Hist.* 1044. Here too, Congress displayed its determination to deny EPA authority to engage in cost-benefit analysis – an intent

wholly inconsistent with petitioners' claim that Congress delegated EPA such authority under Section 316(b).

E. This Court Must Respect the Policy Choice Made by Congress

1. No less than in 1972, many today sharply disagree about the use of cost-benefit analysis in the establishment of environmental performance standards and, relatedly, the wisdom of delegating to EPA the authority to base those standards on its independent weighing of costs and benefits. Some support such a delegation (*e.g.*, Cass R. Sunstein, *The Cost-Benefit State: The Future of Regulatory Protection* (2002)); others oppose (*e.g.*, David M. Driesen, *Distributing the Costs of Environmental, Health, and Safety Protection: The Feasibility Principle, Cost-Benefit Analysis, and Regulatory Reform*, 32 B.C. Envtl. Aff. L. Rev. 1 (2005); Frank Ackerman & Lisa Heinzerling, *Pricing the Priceless: Cost-Benefit Analysis of Environmental Protection*, 150 U. Pa. L. Rev. 1553 (2002)); and some propose a middle ground (*e.g.*, Richard L. Revesz & Michael A. Livermore, *Retaking Rationality – How Cost-Benefit Analysis Can Better Protect the Environment and Our Health*, 1-45 (2008); Sidney A. Shapiro & Christopher H. Schroeder, *Beyond Cost-Benefit Analysis: A Pragmatic Reorientation*, 32 Harv. Envtl. L. Rev. 433 (2008)).

2. But, as the Solicitor General acknowledges, "[t]he question presented here is not whether or to what extent cost benefit analysis is a good thing." U.S. Br. 14. The only question before the Court is the strictly legal question posed by this Court in granting the petition: whether Congress authorized EPA in Section 316(b) to compare costs and benefits in determining BTA. Unlike

several of petitioners' amici (*e.g.*, American Enterprise Institute, Pacific Legal Foundation), many of those who advocate greater use of cost-benefit analysis also apprehend the limits of the judicial function. They recognize the essential difference between what they believe the law should be and what the law is; they acknowledge that Congress has in fact widely rejected the view that cost-benefit analysis should be the central touchstone in all environmental lawmaking; and they understand the reasons for that congressional determination, even if they disagree with it as a matter of policy. See Hon. Stephen Breyer, *Breaking the Vicious Circle – Toward Effective Risk Regulation*, 41-42 (1993) ("There are institutional reasons * * * why Congress may wish to write legislation of this kind. * * * * Congress may distrust the Executive Branch to carry out a more broadly worded instruction with sufficient vigor."); see also *id.* at 57 (referring to "a history of conflict arising out of what Congress saw as an Executive Branch effort to curtail environmental regulation"); Robert H. Frank & Cass R. Sunstein, *Cost-Benefit Analysis and Relative Position*, 68 U. Chi. L. Rev. 323, 331 (2001) ("Presidents and courts have circumscribed authority; they must act consistently with federal statutes, which often forbid cost-benefit balancing. Consider, for example, * * * the Clean Water Act * * *, which contain[s] provisions banning agencies from balancing costs against benefits."); Cass R. Sunstein, *Which Risks First?*, 1997 U. Chi. Legal F. 101, 134 (identifying BAT as one of the "most criticized features" of the Clean Water Act because of the absence of cost-benefit comparison authority); Eric A. Posner, *Controlling Agencies with Cost-Benefit Analysis: A Positive Political Theory Perspective*, 68 U. Chi. L. Rev. 1137, 1182 (2001) ("Agencies often provide implausible estimates of costs and benefits, use different discount

rates and valuations across regulations, and even fail to monetize or quantify all the relevant costs and benefits."); see also Revesz & Livermore, *Retaking Rationality*, *supra* at 55-147 (detailing "eight fallacies" of cost-benefit analysis).

3. Finally, the rulemaking at issue in this case highlights the reasons why Congress decided against authorizing EPA to strike its own cost-benefit balance in determining BTA. See Economists Frank Ackerman, et al. Amicus Br. 29-35; OMB Watch Amicus Br. II.C. In purporting to engage in cost-benefit analysis, EPA assigned no dollar value to one of the most significant impacts of regulating cooling water intake structures: saving aquatic organisms that remain in the ecosystem. EPA monetized only fish that could be caught and sold commercially. Pet. App. 482a-485a. By its own admission, the Agency gave no dollar value to 98.2 percent of organisms saved by its own Phase II rule, let alone those greater numbers that might have been saved by more demanding performance standards, not because they lacked any value, but because it was too difficult to determine a meaningful market value for them. See *id.* at 499a. This is just one of the many limitations in the cost-benefit comparison that EPA performed in the Phase II rulemaking. See J.A. 211-244 (comment letter of Dr. Frank Ackerman).[23]

It was just because of these kinds of limitations in the application of cost-benefit analysis to the aquatic environment, which had plagued the pre-1972 law, that

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[23] Relatedly, several states complained about the enormous burden that would be imposed on them, in their capacity as permitting authorities, were they required to undertake the factfinding necessary for cost-benefit comparisons. See J.A. 209-210, 252, 257-58, 270-71.

Congress made a different policy choice in favor of technology-based performance standards such as BTA. Many believe that Congress's bold move in 1972 in choosing the technology-based approach over the prior water quality and cost-benefit balancing approach is the major reason for much of the Clean Water Act's success during the past several decades. See Environmental Law Professors Amicus Br. I.C. But here, too, it is ultimately for Congress to decide which regulatory techniques will be most effective in addressing the nation's environmental problems.

"The question * * * is not what a court thinks is generally appropriate to the regulatory process; it is what Congress intended for *these* regulations." *E.I. du Pont de Nemours*, 430 U.S. at 138; see *Ali v. Federal Bureau of Prisons*, 128 S. Ct. 831, 841 (2008) ("We are not at liberty to rewrite the statute to reflect a meaning we deem more desirable. Instead, we must give effect to the text Congress enacted * * *."). "All the policy reasons in the world cannot justify reading a substantive provision out of a statute." *North Carolina v. EPA*, 531 F.3d 896, 910 (D. C. Cir. 2008).[24]

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[24] Because the Second Circuit invalidated EPA's rejection of closed-cycle cooling and its proffered "suite of technologies" on a ground entirely separate and independent from the single issue on which this Court granted review – EPA's authority to compare costs and benefits – the lower court's remand of those aspects of the rulemaking will, in all events, be undisturbed by the Court's resolution of the question presented. The court's threshold ruling was the absence of any adequate EPA explanation of the rulemaking's basis. The court made clear that this was an independent error: "EPA was required to explain its judgment and the basis for it" (Pet. App. 35a); and "[t]he record evidence alone here * * * is oblique, complicated, and insufficient to permit us to determine what the EPA relied upon in reaching its conclusion" (*id.*). The court faulted EPA for failing to provide (1) a record that

CONCLUSION

The judgment of the court of appeals should be affirmed.

Respectfully submitted.

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would permit a court "to discern * * * how the EPA determined that the cost of closed-cycle cooling could not be reasonably borne by the industry" (Pet. App. 33a); (2) an explanation of "its statement that the suite of technologies 'approach[es]' the performance of closed-cycle cooling" (*id.*); and (3) an "adequate comparison in the Rule's proposal, the final Rule or its preamble, or the EPA's submissions to this Court of the effectiveness of closed-cycle cooling and the group of technologies whose effectiveness provided the basis for the Phase II Rule's performance standards" (*id.* at 33a-34a). An agency must at a minimum "cogently explain why it has exercised its discretion in a given manner." See *Motor Vehicles Manufacturers Ass'n v. State Farm*, 463 U.S. 29, 48 (1983). In all events, should this Court reverse on the sole question presented, it should leave for the Second Circuit the question of the impact, if any, on that court's other rulings. As described above, moreover, the Court should decline petitioners' efforts to have this Court consider issues distinct from the question presented, including the reasonableness of EPA's ranges (see note 16, *supra*) and the need for site-specific BTA determinations (see note 17, *supra*).